

IN THE CLAIMS:

Please amend the claims as follows.

1. (Currently Amended) Method of ~~monitoring~~ measuring wavelengths of optical signals ~~travelling~~ traveling in an optical fibre ~~wherein~~ fiber, the method comprising the steps of:

conducting the optical signals to a narrowband optical filter ~~which can be controlled~~ controllable by a control signal, ~~and in which the interdependence is known~~ between the wavelength of ~~the~~ an optical signal obtained from the output of the filter and the wavelength of the control signal being known;

C1 converting the optical ~~signal~~ signals obtained from the output of the optical filter into an electric signal;

adjusting the filter by changing the control signal in such a way that the window formed by its pass band will ~~slide within~~ scan the entire wavelength range being ~~examined~~ measured;

determining the ~~filter~~ control signals corresponding to the peak values of the ~~obtained~~ electric signal, and determining the wavelengths corresponding to the control signals.

2. (Currently Amended) Method as defined in claim 1, wherein the ~~filter~~ control signal is an electric signal.

3. (Currently Amended) Method as defined in claim 1, wherein the dependence of the wavelength of the optical signal obtained from the filter output on the ~~filter~~ control signal is stored in a memory in advance.

4. (Currently Amended) Method as defined in claim 3, wherein the determination of ~~filter~~ control signals corresponding to peak values of the electric signal and the determination of ~~corresponding~~ wavelengths corresponding to the control signals ~~based on these~~ is performed based on the dependence stored in the memory.

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5. (Canceled).

6. (Canceled).

7. (Currently Amended) Arrangement for ~~monitoring~~ measuring wavelengths of optical signals ~~travelling~~ traveling in an optical ~~fibre~~, ~~wherein it~~ fiber, the arrangement includes including:

a narrowband optical filter, ~~which can be controlled~~ controllable by ~~filter tuning~~ control signal, and in which the interdependence is ~~known~~ between the wavelength of an optical signal obtained from the filter output and the wavelength of the control signal being known and ~~the wavelength of the optical signal obtained from the filter output~~, and

~~to the input of which~~ having as an input the optical signals to be ~~examined~~ measured are conducted;

a light detector, ~~which is~~ connected to the output of the optical filter ~~and which~~ being capable of converts converting the optical ~~signal~~ signals into an electric signal;

a control electronics circuit, ~~which is~~ connected ~~on the one hand~~ to the control input of the filter to give ~~a filter tuning~~ the control signal being adjustable for scanning the entire wavelength range being examined and ~~on the other hand~~ to the light detector to receive the electric signal ~~given by it~~.

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8. (Canceled).

9. (Canceled).

10. (Currently Amended) Arrangement as defined in claim 7, ~~wherein it also~~ includes the arrangement further including storing means for storing the interdependence between the control signal and the wavelength of the optical signal obtained from the filter output.

11. (Currently Amended) Arrangement as defined in claim 8 7, wherein the control electronics circuit includes a microprocessor, ~~which~~ for determining from the electric signal obtained from the light detector ~~determines filter~~ control signals

corresponding to ~~it's~~ the peak values of the electric signal as well as the ~~corresponding~~
wavelengths corresponding to the control signals ~~based on these~~.

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12. (Currently Amended) Arrangement as defined in claim 7, ~~wherein it includes~~
the arrangement further including an optical directional coupler, which separates for
separating a part of the light power ~~travelling~~ traveling in the optical fibre fiber to be
conducted to the input of the controllable filter.
